IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A method of treating or preventing decreased nitric oxide formation resulting from sub-optimal urea cycle function in a subject, the method comprising:

   (a) providing a subject under conditions of sub-optimal urea cycle function, wherein the sub-optimal urea cycle function further comprises decreased plasma citrulline; and

   (b) administering to the subject a therapeutically effective amount of ~~a nitric oxide precursor~~ citrulline, whereby treatment or prevention of decreased nitric oxide formation resulting from sub-optimal urea cycle function is accomplished.

2. (Original) The method of claim 1 wherein the administering is intravenously or orally.

3. (Canceled)

4. (Currently amended) The method of claim 1, wherein the subject is suffering from a disorder associated with decreased ~~urea cycle intermediate production~~ decreased plasma citrulline or wherein the subject is exposed or about to be exposed to an environmental stimulus associated with ~~decreased urea cycle intermediate production~~ decreased plasma citrulline.

5. (Previously presented) The method of claim 4, wherein the disorder is selected from the group consisting of hepatitis, cirrhosis, pulmonary hypertension, necrotizing enterocolitis (NEC), Acute Respiratory Distress Syndrome, ethnic specific endothelial dysfunction, erectile dysfunction, sepsis, asthma, and combinations thereof.

6. (Previously presented) The method of claim 4, wherein the environmental stimulus is selected from the group consisting of chemotherapy, cardiac surgery, increased oxidative stress, septic shock, acute asthma attack, hypoxia, hepatotoxin exposure and combinations thereof.

7. (Canceled)

8. (Currently amended) The method of claim 1, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 100 mg to about 30,000 mg.

9. (Currently amended) The method of claim 8, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 250 mg to about 1,000 mg.

10. (Original) The method of claim 1, wherein the subject is a human.

11-18. (Canceled)

19. (Currently amended) The method of claim [[18]] 35 or 36, wherein the administering is intravenously or orally.

20. (Canceled)

21. (Currently amended) The method of claim [[18]] 35 or 36, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 100 mg to about 30,000 mg.

22. (Currently amended) The method of claim 21, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 250 mg to about 1,000 mg.

23. (Currently amended) The method of claim [[18]] 35 or 36, wherein the subject is a human.

24. (Canceled)

25. (Canceled)

26. (Currently amended) The method of claim [[25]] 38, wherein the administering is intravenously or orally.

27. (Canceled)

28. (Currently amended) The method of claim [[25]] 38, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 100 mg to about 30,000 mg.

29. (Currently amended) The method of claim 28, wherein the ~~nitric oxide precursor~~ citrulline is administered in a dose ranging from about 250 mg to about 1,000 mg.

30-33. (Canceled)

34. (Previously presented) The method of claim 6, wherein the environmental stimulus comprises increased postoperative pulmonary vascular tone associated with cardiac surgery.

35. (Currently amended) A method of treating or preventing decreased nitric oxide formation resulting from sub-optimal urea cycle function in a subject suffering from a disorder associated with decreased ~~urea cycle intermediate production~~ plasma citrulline, the method comprising:

(a) providing a subject suffering from a disorder associated with decreased ~~urea cycle intermediate production~~ plasma citrulline, wherein the disorder is pulmonary hypertension; and

(b) administering to the subject a therapeutically effective amount of citrulline, whereby treatment or prevention of decreased nitric oxide formation resulting from sub-optimal urea cycle function is accomplished.

36. (Currently amended) A method of treating or preventing decreased nitric oxide formation resulting from sub-optimal urea cycle function in a subject exposed to an environmental stimulus associated with decreased ~~urea cycle intermediate production~~ plasma citrulline, the method comprising:

(a) providing a subject exposed to an environmental stimulus associated with decreased ~~urea cycle intermediate production~~ plasma citrulline, wherein the environmental stimulus is cardiac surgery; and

(b) administering to the subject a therapeutically effective amount of citrulline, whereby treatment or prevention of decreased nitric oxide formation resulting from sub-optimal urea cycle function is accomplished.

37. (Canceled)

38. (Currently amended) A method of raising a level of a nitric oxide precursor in a subject suffering from sub-optimal urea cycle function, the method comprising:

(a) providing a subject under conditions of sub-optimal urea cycle function, wherein the sub-optimal urea cycle function further comprises decreased plasma citrulline; and

(b) administering to the subject a therapeutically effective amount of citrulline, whereby the level of a nitric oxide precursor in the subject is raised.

Please add the following new claims:

39. (New) The method of claim 1, wherein decreased plasma citrulline comprises plasma citrulline levels of less than 24.4 μM.

40. (New) The method of claim 35, wherein decreased plasma citrulline comprises plasma citrulline levels of less than 24.4 μM.

41. (New) The method of claim 36, wherein decreased plasma citrulline comprises plasma citrulline levels of less than 24.4 μM.

42. (New) The method of claim 38, wherein decreased plasma citrulline comprises plasma citrulline levels of less than 24.4 μM.